

## Questions and Answers

PON-08-005

### Combined Heat and Power and Combined Cooling, Heating and Power Grant Solicitation

1. **Q. Could you provide a list of CHP/CCHP projects previously funded by the Energy Commission's PIER Program? Could you point me to where I could find more detailed information on previously funded projects (e.g. interim/final reports)?**
- A. Reports and information from past and current projects can be accessed at the web links below. The first link is the main PIER reports page. The second link contains reports specifically from EPAG projects. The third link accesses the PIER Program's Annual Reports which contain information about completed and ongoing PIER projects.

[http://www.energy.ca.gov/research/reports\\_pubs.html](http://www.energy.ca.gov/research/reports_pubs.html)

<http://www.energy.ca.gov/publications/searchReports.php?pier1=environmentally-preferred>

[http://www.energy.ca.gov/research/annual\\_reports.html](http://www.energy.ca.gov/research/annual_reports.html)

2. **Q. When is the start date for the project?**
- A. September 2009 would be the earliest estimated project start date Applicants should use when developing their proposals. Actual project start dates will be the date the Agreement is fully executed (i.e., the date that both parties have signed the Agreement).
3. **Q. What's the length of most projects?**
- A. The maximum length of a project is four years, but we encourage you to include a cushion of six months to a year to ensure time for testing, reporting, and meetings within that four-year period.
4. **Q. Please clarify the restrictions on profit (page 12, section 15. I.)?**
- A. As stated in the Grant Solicitation, the budget must NOT include any profit from the proposed project, either as a reimbursed item or as match share. However, it is fine for Applicants to otherwise make a profit from the project; profit just cannot be part of the grant budget. For example, if a company proposes a demonstration project, it can sell the technology to the host site and earn a profit from the sale. The restriction is that in the grant with the Energy Commission, Energy Commission funds cannot be used for profit, and the company's profit cannot count as match funds.

5. **Q. Can a single entity submit multiple projects?**  
A. Yes, but they must be separate and distinct projects.
6. **Q. Can you specify what types of organizations can apply? Are non-profits, for-profits, and academic institutions eligible to apply?**  
A. The solicitation does not contain restrictions on the types of organizations that can apply. Non-profits, for-profits, academic institutions, and other types of organizations are eligible to apply.
7. **Q. Can a university partner with another university?**  
A. Yes.
8. **Q. Can we team up with a California university or California company?**  
A. Yes.
9. **Q. If a non-California company submits a proposal, does the project demonstration have to be in California?**  
A. No.
10. **Q. Are there restrictions for international organizations applying?**  
A. No. However, please be aware that federal export control laws may prevent the Energy Commission from funding certain projects from non-US organizations.
11. **Q. Can part of the proposal's budget be used for education for increasing market penetration (e.g., technology transfer)?**  
A. Yes. The Scope of Work template (Attachment E) contains a task called "Technology Transfer Activities."
12. **Q. Is there any guidance as to what percent of the budget can be/should be/is typically dedicated to education and outreach activities (e.g., Technology Transfer)?**  
A. There is no specific guidance as to the percentage, but the Scope of Work includes a task for Technology Transfer Activities.
13. **Q. Does match funding have to be 1:1?**  
A. No. See Scoring Criterion #9 for more information on match funding.
14. **Q. Is there a limitation on match funds?**  
A. No.

15. **Q. Could SGIP money be used as match funds?**  
A. SGIP funds may be used as match funds.
16. **Q. Does confidential information include intellectual property (page 13, Section 16)?**  
A. The statement on page 13, Section 16 indicates that no confidential information will be accepted in a proposal and any proposal with confidential information will be rejected. This refers to any information the Applicant marks as confidential. An Applicant can submit any information including intellectual property as part of the proposal as long as the Applicant does not mark it as confidential and understands that it will become publicly available.
17. **Q. Please confirm that page count limit is a suggested guideline or an absolute limit. Also, please confirm if the page count includes or excludes attachments.**  
A. The maximum number of pages for a proposal is 50 pages, including attachments.
18. **Q. Could you explain the equipment ownership issue more? How do you utilize equipment without purchasing it?**  
A. We encourage that equipment, as defined on page 21 of the Terms and Conditions (Attachment I), be purchased with match funds as opposed to PIER funds. If equipment is purchased with PIER funds, the State of California's disposition requirements must be followed. Renting equipment is an alternative to purchasing equipment if renting is a feasible option for the project.
19. **Q. Our project would involve using on the order of \$400,000 of PIER funds to purchase heat transfer equipment. Would this be a fatal flaw for the application?**  
A. No, but the purchase of equipment using PIER funds is discouraged. Due to the State of California's disposition requirements for equipment, we encourage the use of match funds to purchase equipment. The purchase of equipment with PIER funds does not affect the scoring and merits of a proposal.
20. **Q. Would a one-year rental of equipment for 10% of the purchase price, where the purchase price would otherwise be ~\$400,000, using PIER funds be discouraged?**  
A. Renting equipment using PIER funds is allowable and not discouraged because there is no ownership leading to the need to follow the State disposition requirements. If you are renting to own and using PIER funds, you must follow the State's disposition requirements.

21. **Q. Can the equipment (reciprocating engine) of a different solicitation be used for this solicitation?**
- A. Yes. It is also possible that a portion of the item could be claimed as match, but only in a very limited set of circumstances. Nothing purchased in the prior agreement with only PIER funds can be used as match in a proposal to this solicitation. If an item was purchased in whole or part with match funds, the value of the item pledged as match in the prior agreement cannot count towards match under this solicitation (i.e., the same value of an item cannot be claimed as match in two different PIER agreements). However, if the entity purchased the item with its own funds and only claimed a part of the value as match in the prior agreement, the amount of the remaining value dedicated to work under this solicitation can count as match. For example, Company X paid \$100,000 for an item but only dedicated and claimed \$20,000 worth of its value in match under the prior agreement. The work under the proposal will reduce its remaining residual value by \$40,000. Up to \$40,000 could be claimed as match under this solicitation.
22. **Q. Is a technology that would be applied primarily to CHP plants over 25 MW eligible to apply?**
- A. Yes. The solicitation does not have restrictions on CHP system size.
23. **Q. Is there a minimum system size in terms of kilowatts?**
- A. No.
24. **Q. Do you have to meet CARB requirements at the time of submission?**
- A. Not for the proposal to qualify for the Grant Solicitation. Please see the third bullet under Scoring Criterion #3 for additional details. Demonstration projects must still obtain any required permits.
25. **Q. In Attachment B of the Grant Solicitation, section (A) contains text referring to "CHP technology integrated into a standardized package." What is a "standardized package," and is there a way for the Energy Commission to validate a "standardized package?"**
- A. Attachment B of the RFP is taken from information on the California Air Resource Board's (ARB) web site ([www.arb.ca.gov/energy/dg/dg.htm](http://www.arb.ca.gov/energy/dg/dg.htm)) and was included as a reference source for criteria pollutant emissions from distributed generation/combined heat and power systems. The ARB emission limits will be applied to all CHP system projects submitted in scoring the proposals.

26. **Q. Can solar energy be used as the heat source for a CHP project?**  
A. Yes, if the solar energy is used to both generate electricity and provide heat, hot water, or steam to a process.
27. **Q. For fuel cells, can we use natural and digester gas?**  
A. Yes, either is acceptable.
28. **Q. Can we design, install, and test in the same project?**  
A. Yes.
29. **Q. Can we apply carry-on work from the recent mobile-to-stationary solicitation to the CHP/CCHP solicitation?**  
A. You can apply, but it may be difficult to justify carry-on work for a project that has just started.
30. **Q. Are extensions of currently funded PIER projects eligible for funding under this solicitation?**  
A. Yes, provided that the proposal is for new tasks. As stated in the “Eligible Applicants” section on page 6 of the solicitation, funds may not be used to augment activities currently funded under existing PIER agreements.
31. **Q. Will you score differently for a CHP proposal versus a CCHP proposal?**  
A. No.
32. **Q. Are there weighting factors for scoring proposals that use different types of prime movers?**  
A. No.
33. **Q. Are mechanical CHP projects (as opposed to electrical CHP) eligible under this solicitation?**  
A. If mechanical refers to the direct use of shaft power to perform useful work, displacing grid-supplied electrical power, then the project would qualify.
34. **Q. As a follow-up to the question about mechanical CHP projects, how important is grid connectivity and actual production of electricity?**  
A. We draw a distinction between an RD&D project submitted for funding and the commercial application of the technology or system once developed. This Grant Solicitation is funded by electricity ratepayers and must benefit electricity ratepayers. The proposal should show that the technology has market potential in grid-connected applications.

35. Q. We are approaching pilot demonstration stage for development of a 1KW output power Stirling engine, which converts low to medium temperature (100-300C) heat sources to electricity. Currently we are testing the pilot engine with evacuated tube solar thermal collectors on a distributed rooftop residential application. We have plans to also pilot demo the engine at an industrial waste heat facility. We are interested in applying for the PIER grant to develop a scale version of the engine at the 10KW output power range, which would increase the input heat temperature requirements to 200-400C. **Would the project qualify for this funding opportunity based on the power, temperature range, and type of engine being developed?**
- A. A project to develop a bottoming cycle recovering waste heat for use in a Stirling engine generator meets the definition of CHP and is eligible to apply for funding.
36. Q. **Would a project developing a method for converting biowaste to H2 and waste heat qualify?**
- A. The project may qualify to apply for funding; however, the Grant Solicitation, including the Scoring Criteria, is focused on CHP system development as opposed to fuel conversion development.
37. Q. **Is it intended for this program to fund policy and economic advice on developing market and regulatory options that address any obstacles and improve the flexibility in the current arrangements?**
- A. No, the Grant Solicitation specifically focuses on advancing the science, technology, and market penetration of CHP systems.
38. Q. **Will the pre-proposal workshop presentations be posted on the website?**
- A. Yes.
39. Q. **Which one is more important, CHP field test or CHP system research?**
- A. Review the Scoring Criteria to assess how proposals will be scored.
40. Q. **A CHP portfolio standard was mentioned as being "currently underway". Is this a recommendation being proposed as part of the Energy Commission's 2009 IEPR process, or is there legislation being proposed to institute such a standard?**
- A. The 2008 Integrated Energy Policy Report Update (pages 106-108) contains information about a CHP portfolio standard. The document is available at [www.energy.ca.gov/2008\\_energypolicy/index.html](http://www.energy.ca.gov/2008_energypolicy/index.html).
41. Q. **Will the Energy Commission assist in identifying suitable field demo locations?**
- A. No.

42. **Q. How much energy efficiency improvement is PIER seeking?**  
 A. There is no percentage improvement required. Please review the Scoring Criteria, especially Scoring Criterion #2 and Scoring Criterion #4.
43. **Q. Is a demonstration project required or can an analytical study qualify?**  
 A. A demonstration project is not required. Please review the Scoring Criteria.
44. **Q. Is a field demonstration required? Must it be completed within the four-year window?**  
 A. A field demonstration is not required, but one year of performance data is preferred. The entire project, including collection of data and completion of final reports, must be completed within the four-year period.
45. **Q. Would assembly of component parts, packaging/assembly meet the definition of “Substantially manufactures” as used in attachment M for the California-based entity preference points?**  
 A. Possibly. Assembly and packaging is just one part of the entire manufacturing process. In some situations, it might equate to a substantial amount of the overall effort, and in other situations, it might just be a very small last step. Applicants should provide information regarding how much of the entire process is performed within and outside of California to make a case that a substantial amount occurs within California.

The Energy Commission has purposely not defined "substantially" for this solicitation because Applicants can propose a wide variety of research and/or technologies. One definition may not fit all situations. An Applicant must provide information about its business that shows it substantially manufactures the product or substantially performs the research within California that is the subject of the award. Some factors to consider include the amount of time, labor, and money spent within California. If, for example the manufacturing cost of the proposed technology is \$300,000, the Applicant could show how much of the \$300,000 is being spent in California versus out of state. If the proposal mainly focuses on research, the Applicant could show how much time and money will be spent in California versus out of state to conduct the research.

46. **Q. With respect to the California-based entity (CBE) preference points, would a home office in California qualify?**  
 A. Having a home office in California might meet the CBE requirement that an entity must either have its headquarters or an office in the state. However, understand that the purpose of the law is to provide a preference to projects

that result in job creation and economic benefits in California. This means an Applicant with an office in the state must be in compliance with all required actions to conduct business in California (such as being registered and in good standing with the California Secretary of State and having copies of any required state/local permits and receipts for annual filing fees and the like). In addition, please be aware that another CBE requirement is that the entity must substantially manufacture the product or substantially perform the research within California that is the subject of the award. This might be hard for an out-of-state Applicant with just a home office in the state to show. Please see the answer to the previous question for a discussion of the term "substantially" as it is used in this context.

47. **Q. What organization makes the determination as to whether an organization is a California-based entity?**
- A. The Energy Commission will make the determination.